

Sub 3 3. (Amended) The product of claim 1, wherein the collagen of at least one of the porous layer and of the essentially compact membrane is selected from the group consisting of collagen and a mixture of collagen with a substance selected from the group consisting of a polysaccharide, a cellulose, dextran, an alginate and a carrageenan.

4. (Amended) The product of claim 3 wherein said polysaccharide is selected from the group consisting of glycosaminoglycan and chitosan.

Sub 5 5. (Amended) A composite product comprising the composite acellular product of claim 1, wherein at least one of the porous layer and of the essentially compact membrane, comprises living cells selected from the group consisting of normal living cells, genetically modified living cells and malignant living cells.

B 6. (Amended) The product of claim 5, wherein said living cells originate substantially exclusively from young subjects.

7. (Amended) The product of claim 5, wherein said living cells originate substantially exclusively from elderly subjects.

8. (Amended) The product of claim 5, wherein the living cells are selected from the group consisting of fibroblasts, keratinocytes, melanocytes, Langerhans' cells originating from the blood, endothelial cells originating from the blood, blood cells, sebocytes, chondrocytes, osteocytes, osteoblasts and Merkel's cells originating from the blood, said cells being normal, genetically modified or malignant.

Sub 9 9. (Amended) A composite product forming a collagen support comprising at least one porous collagen layer covered on at least one side with an essentially compact collagen membrane selected from the group consisting of a collagen film prepared by drying a collagen gel and a compressed collagen sponge prepared by a compression of a collagen sponge at a pressure of at least about 50 bar, said porous layer comprising living fibroblasts and said

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essentially compact membrane comprising on the surface thereof living cells selected from the group consisting of keratinocytes, melanocytes, Merkel's cells originating from the blood, Langerhans' cells originating from the blood, sebocytes, cells originating from the blood, and nerve cells, the surface layer containing the living cells being cultivated while caused to emerge at the air-liquid interface of a compatible culture medium, while the porous layer containing the fibroblasts remains immersed during said cultivation step to give a reconstructed skin composed of a reconstructed dermis, comprising the fibroblasts having colonized the porous collagen layer forming a three dimensional matrix, said dermis being covered with a multilayer epidermis comprising said collagen membrane.

10. (Amended) The product of claim 1, wherein the collagen sponge is compressed at a pressure of at least about 50 bar, and a temperature between about 20°C and 80°C.

11. (Amended) The product of claim 10, wherein the pressure is between about 50 bar and 200 bar and at a temperature between about 40°C and 60°C.

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12. (Amended) The product of claim 1, wherein the essentially compact membrane is prepared prior to combination with the porous layer.

13. (Amended) The product of claim 12, wherein after having prepared the membrane, a collagen gel is deposited on at least one surface of the membrane and the combination of the collagen gel with the membrane is frozen and lyophilised to give said composite product.

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16. (Amended) The product of claim 1, wherein at least one of the porous layer and membrane layer is produced from a collagen gel containing a mixture of soluble collagen and insoluble collagen.

17. (Amended) The product of claim 16, wherein said insoluble collagen comprises collagen fibers.

345 19. (Amended) The product of claim 1, wherein at least one of the porous layer and compact layer is produced from a collagen gel containing a mixture of soluble collagen and insoluble collagen, wherein the collagen is selected from the group consisting of type I collagen and type III collagen.

63 20. (Amended) A process for the manufacture of a composite product comprising at least one porous collagen layer covered on at least one side with a collagen membrane, comprising the steps of:

- a) preparing the collagen membrane either by drying a first collagen gel, or by compressing a collagen sponge, obtained by the freezing-lyophilization of a collagen gel at a pressure of at least 50 bar;
- b) preparing separately a second collagen gel;
- c) depositing either the membrane on the second collagen gel, or pouring the second collagen gel onto the membrane; and
- d) freezing-lyophilizing the whole to give said composite product.

22. (Amended) The process of claim 20, wherein the collagen sponge is compressed at a pressure between about 50 bar and about 200 bar.

23. (Amended) The process of claim 20, wherein the compression step takes place at a temperature of between about 20°C and 80°C.

24. (Amended) The process of claim 20, wherein the collagen is selected from the group consisting of collagen and a mixture of collagen with a substance selected from the group consisting of a polysaccharide, cellulose, dextran, an alginate and a carrageenan.

25. (Amended) The process of claim 24, wherein the polysaccharide is selected from the group consisting of a glycosaminoglycan and chitosan.

26. (Amended) The process of claim 20, wherein said collagen comprises mammalian collagen.

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27. (Amended) The process of claim 20, wherein said collagen comprises bovine collagen.

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28. (Amended) The process of claim 20, wherein at least one of the porous layer and membrane layer, are crosslinked.

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34. (Amended) The process of claim 20, wherein living cells are introduced into at least one of the porous layer or membrane layer.

36. (Amended) The process of claim 34, wherein said living cells originate substantially exclusively from young subjects.

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37. (Amended) The process of claim 34, wherein said living cells originate substantially exclusively from elderly subjects.

38. (Amended) The process of claim 34, wherein said living cells are selected from the group consisting of fibroblasts, keratinocytes, melanocytes, Langerhans' cells originating from the blood, endothelial cells originating from the blood, blood cells, chondrocytes, osteocytes, osteoblasts, Merkel's cells originating from the blood, sebocytes, adipocytes and nerve cells.

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40. (Amended) The process of claim 20, wherein living cells are deposited on the surface of the membrane, said cells being selected from the group consisting of keratinocytes, melanocytes, Merkel's cells originating from the blood, Langerhans' cells originating from the blood, sebocytes, cells originating from the blood, and nerve cells.

41. (Amended) The process of claim 34, wherein the living cells are provided either by the sequential culture or by the simultaneous culture of the different types of cells, these cells originating from culture or biopsy.

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44. (Amended) The artificial skin of claim 42, wherein said artificial skin comprises living cells obtained substantially exclusively from young cells from young subjects.

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45. (Amended) The artificial skin of claim 42, wherein said artificial skin comprises living cells obtained substantially exclusively from aged cells from elderly subjects.

53. (Amended) The artificial skin of claim 43, wherein said artificial skin comprises living cells obtained substantially exclusively from young cells originating from young subjects.

54. (Amended) The artificial skin of claim 43, wherein said artificial skin comprises living cells obtained substantially exclusively from aged cells originating from elderly subjects.

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55. (Amended) A method of in vitro testing of the efficacy of a potential active substance comprising and using an artificial skin comprising living cells prepared substantially exclusively from young cells taken from young subjects, said artificial skin being prepared essentially from a composite product as defined in claim 1.

56. (Amended) A method of in vitro testing of the efficacy of a potential active substance comprising using an artificial skin comprising living cells prepared substantially exclusively from aged cells taken from elderly subjects, said artificial skin being prepared essentially from a composite product as defined in claim 1.

57. (Amended) A method of in vitro testing of the efficacy of a potential active substance comprising using an artificial skin comprising living cells prepared substantially exclusively from young cells taken from young subjects, said artificial skin being prepared essentially from a composite product as defined in claim 9.

58. (Amended) A method of in vitro testing of the efficacy of a potential active substance comprising using an artificial skin comprising living cells prepared substantially exclusively from aged cells taken from elderly subjects, said artificial skin being prepared essentially from a composite product as defined in claim 9.

Please add new claims 59 through 64.

59. (New) The product of claim 8, wherein said blood cells are selected from the group consisting of macrophages and lymphocytes.

60. (New) The product of claim 38, wherein said blood cells are selected from the group consisting of macrophages and lymphocytes.

Sub 61. (New) A composite product forming a collagen support comprising at least one porous collagen layer covered on at least one side with an essentially compact collagen membrane selected from the group consisting of a collagen film prepared by drying a collagen gel and a compressed collagen sponge prepared by a compression of a collagen sponge at a pressure of at least about 50 bar, said porous layer comprising living cells and said essentially compact membrane comprising on the surface thereof living cells, the membrane surface containing the living cells being cultivated while caused to emerge at the air-liquid interface of a compatible culture medium, while the porous layer containing the fibroblasts remains immersed during said cultivation step to give a reconstructed skin composed of a reconstructed dermis.

62. (New) The product of claim 61, wherein said porous layer comprises fibroblasts.

63. (New) The product of claim 61, wherein said living cells on the surface of the membrane are selected from the group consisting of keratinocytes, melanocytes, Merkel's cells originating from the blood, Langerhans' cells originating from the blood, sebocytes, cells originating from the blood, and nerve cells.

Sub 64. (New) The product of claim 61, wherein said reconstructed dermis comprises the fibroblasts having colonized the porous collagen layer forming a three dimensional matrix, said dermis being covered with a multilayer epidermis comprising said essentially compact collagen membrane.

Remarks

Claims 1-20, 22-45 and 50-64 remain pending in the application. Claim 21 was cancelled, and new claims 59-64 were added herein. Claims 1-13, 16, 17, 19-20, 22-28, 34, 36-38, 40, 41, 44, 45, and 53-58 have been amended as shown above. The claims were amended to